DESI spectral extraction

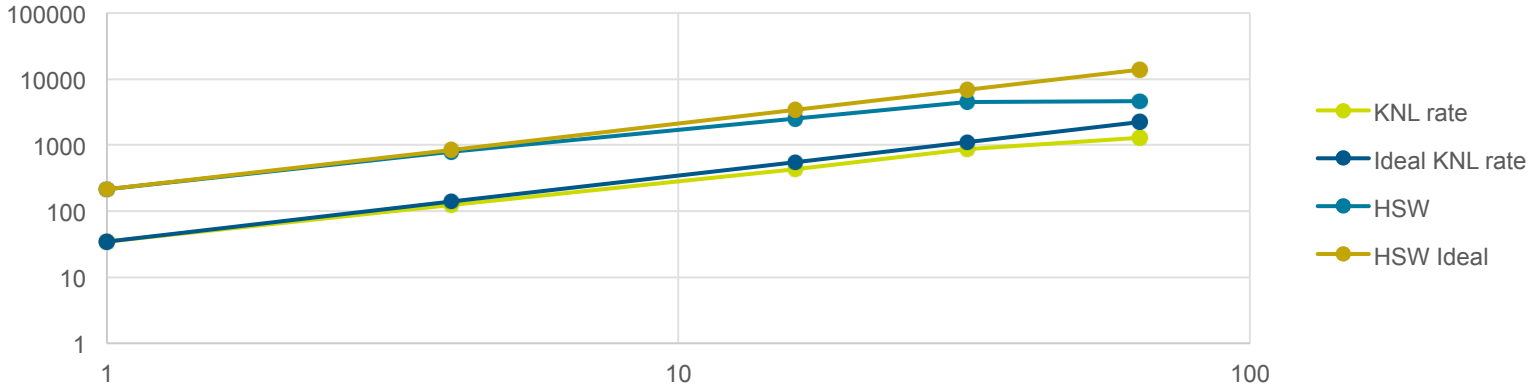
Performance analysis on KNL

Scaling on KNL

KNL			HSW			
time	rate	ideal	time	rate	ideal	
289.6	34.5	34.5	46.8	213.4	213.4	6.188034
318.3	125.7	138	50.4	794	853.6	6.315476
374.6	427.1	552	63.9	2502.6	3414.4	5.862285
373.3	857.2	1104	70.5	4537.7	6828.8	5.295035
495	1292.9	2208	140.1	4567.5	13657.6	3.533191

HSW
Intel(R) Xeon(R) CPU E5-2698 v3 @ 2.30GHz
2x16 cores

KNL (KMP_AFFINITY=disabled)
Intel(R) Xeon Phi(TM) CPU 7210 @000000 1.30GHz
1x256 cores (64x4 HT)



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scipy.linalg.eigh

- CBLAS_DSYMV

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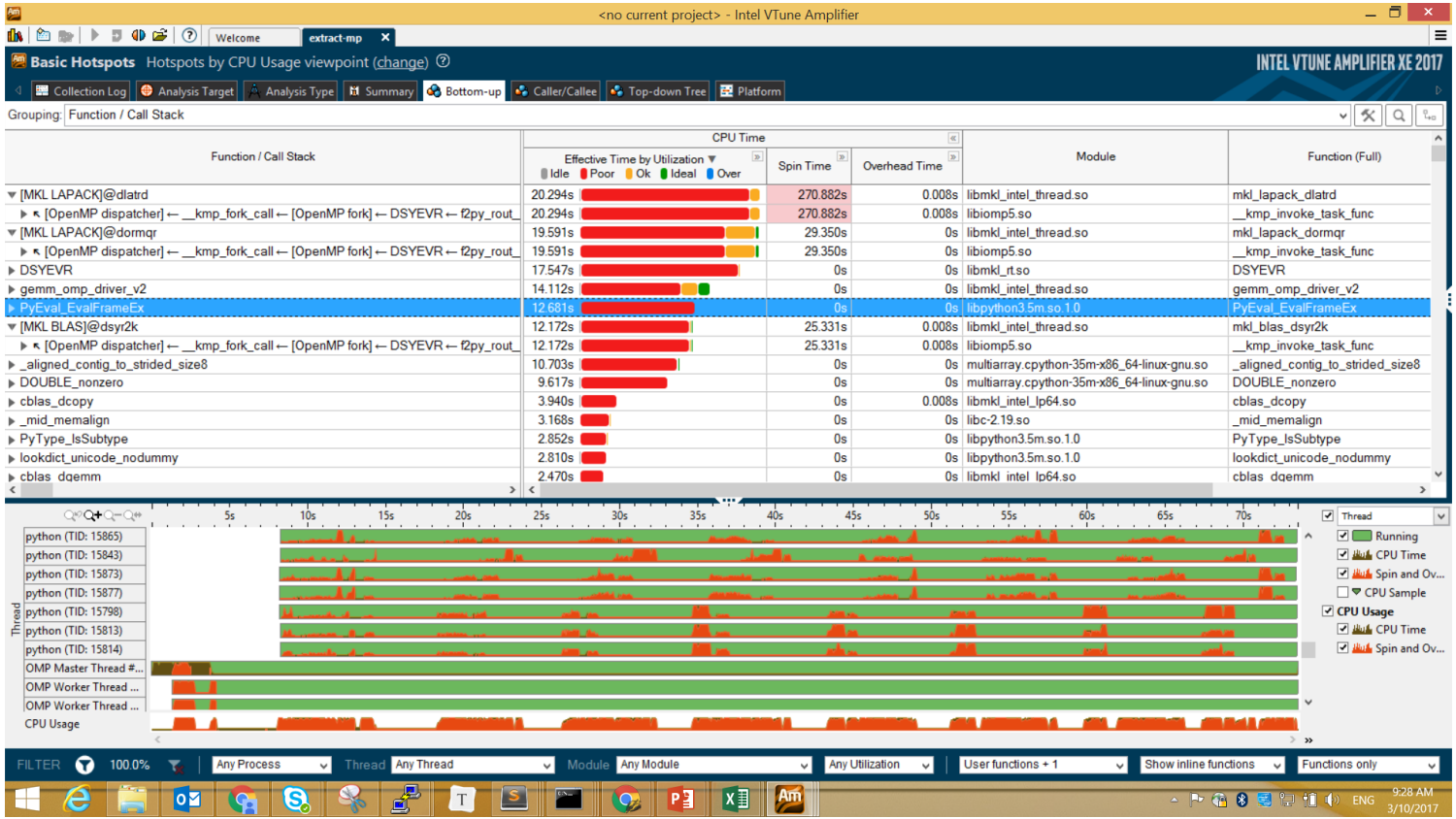
Haswell



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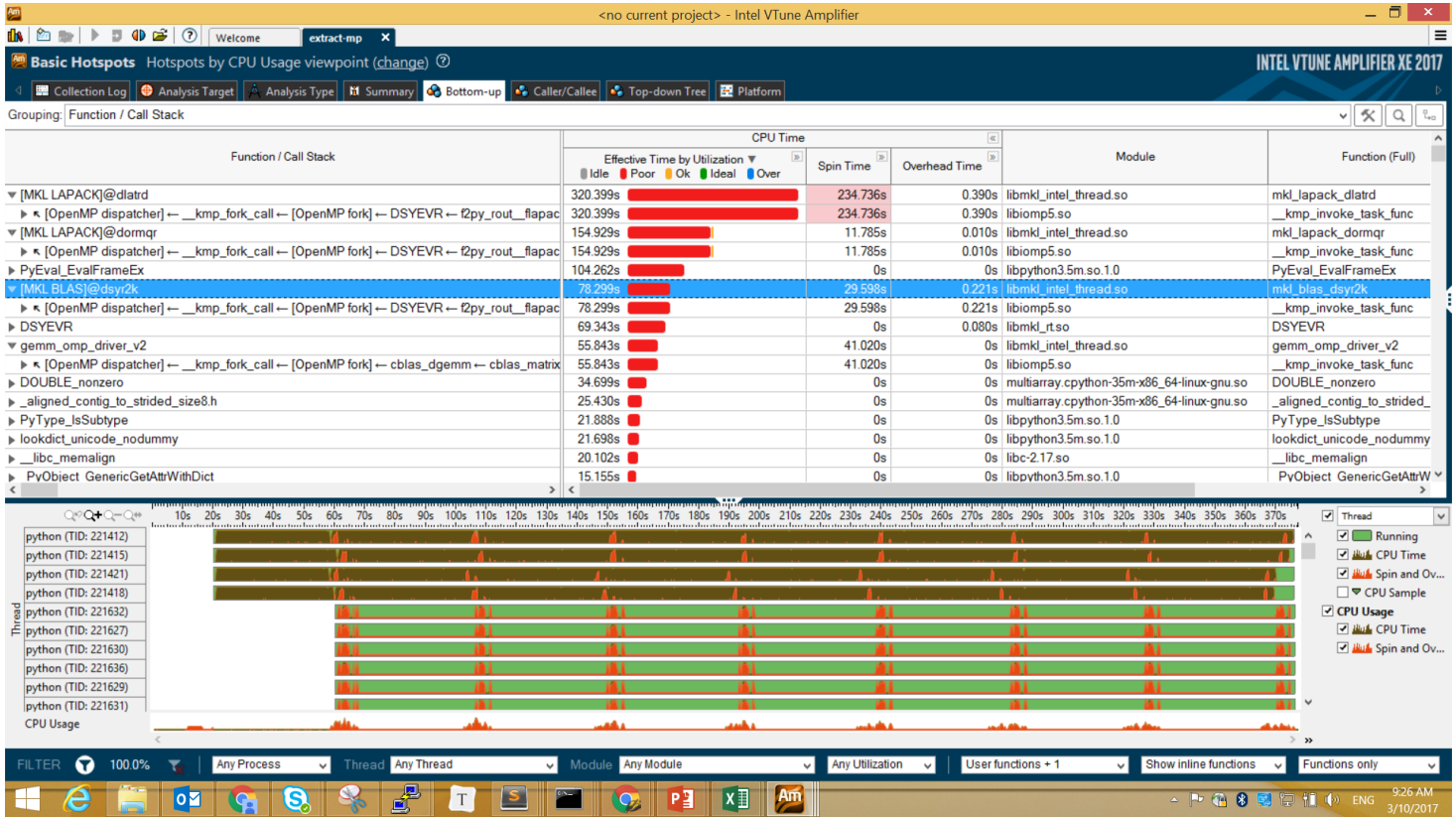
KNL



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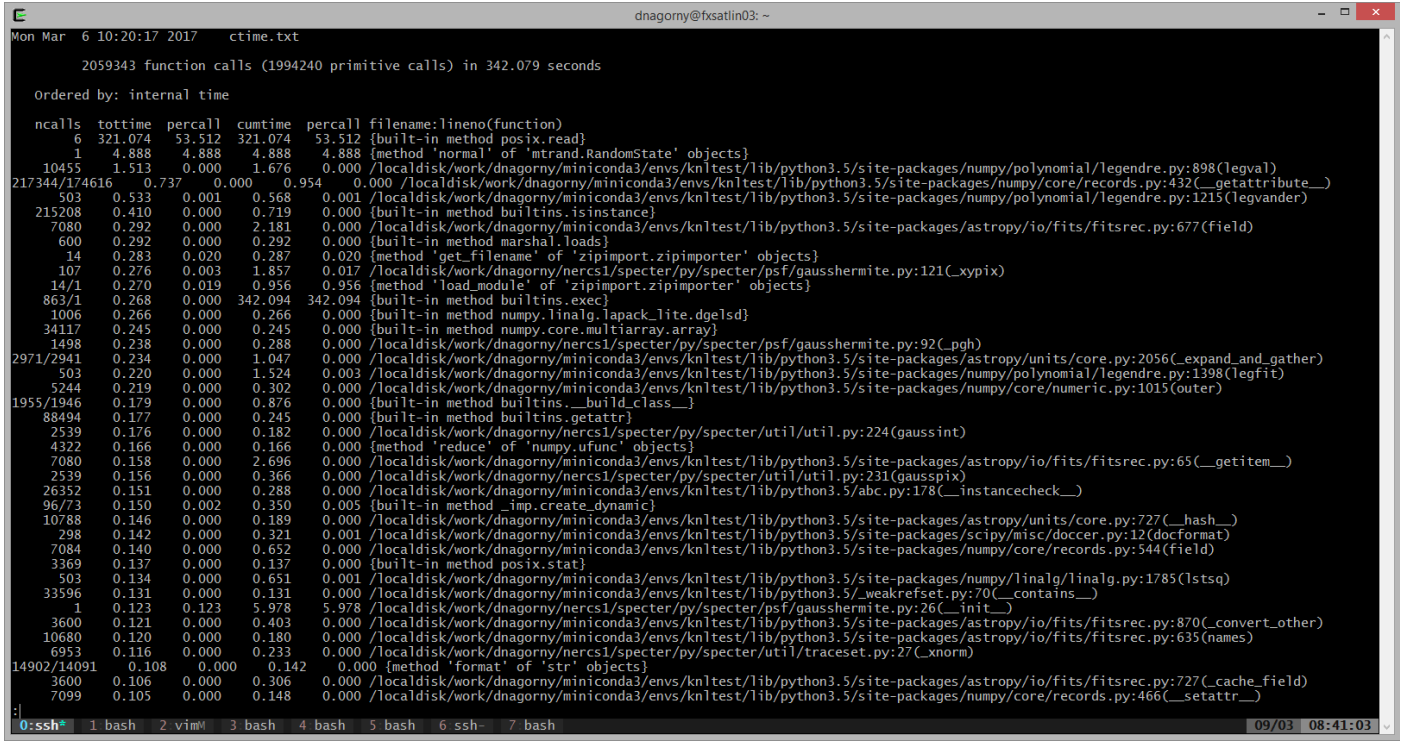
cProfile, 1 process



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